Net Income vs. Cash Flow Analysis: Improving Misleading Financial Reporting

David Kohn, PhD and James Sagner, PhD
School of Business, University of Bridgeport, Bridgeport, CT

Abstract

Standard GAAP accrual accounting protocols can contain misleading (and even fraudulent) information because of certain long-acknowledged interpretations required in constructing financial statements. The occurrence of defaults and bankruptcies in recent years has become a serious problem for regulators, investors, lenders and creditors. This poster reviews an alternative document – the statement of cash flows – that inherently is less prone to manipulation and misinterpretation. The research suggested is to compare various failed company profit and loss results just prior to the incident, to the cash flow statement results for the same period.

1. The Problem of Manipulated Earnings

ROI (return-on-investment) and profits are nearly meaningless in managing a business or in using financial results for investing, lending or other purposes. Did someone say, let's kill all the accountants? Shakespeare's famous quote (from *Henry the Sixth, Part II*) was actually "The first thing we do, let's kill all the lawyers" (act IV, scene 2). And while that may not be a bad idea, the accounting profession could be considered for similar treatment. Accountants provide "dis-information" based on concepts that are centuries old, involving account codes and descriptions which have little relevance to 21st century issues.

The only concept that isn't subject to manipulation is the number of common shares outstanding. Everything else is subject to interpretation and occasionally even fraud. And if earnings are "managed" -- to satisfy the investment community or for any other reason -- then business decisions which depend on accurate financial statements are inevitably going to be wrong.

"Accrual accounting" attempts to match revenues to the costs incurred to realize those revenues. However, accounting conventions allow considerable leeway in the presentation of results. This is not a new problem, and was recognized and dissected as early as 1934 by Graham and Dodd. Renowned for investment commentary, these authors spent about one-quarter of their landmark text *Security Analysis* on understanding and re-computing earnings from published financial reports (5th edition, Sidney Cottle *et. al.*, editors, McGraw-Hill, 1988, Chapters 10-20).

2. Examples of Manipulated Earnings

Here are a few examples of accounting judgment calls ... you decide if the appropriate choices were made.

- Is it a sale if dealers accept delivery of merchandise for which payment isn't due for 6 months, and then only if the goods are sold to their retail customers? Sunbeam did this to pump up financial results in 1997.
- Should revenue be recognized if invoices haven't even been printed? Some dot.com companies (e.g., Covance and Parexel International) included "unbilled services" in their reported revenues, despite customers' right to terminate contracts at any time with no penalty.
- Are earnings credible if critical costs are deferred because of sagging revenues? Kodak cut research and development in 1998 to boost earnings by over 30%.
- Is a company being deceptive by taking a large, current write-off to boost subsequent earnings? Cisco and DaimlerChrysler have used this technique to make future years' results appear significantly improved.
- Can we rely on profits smoothed by using reserves? Reserve accounts are special balance sheet accounts established for possible future requirements of the business. Technology companies often establish reserves to be used in future slow revenue periods.
- Do we have accurate data on the cost to produce sales if expenses are labeled as marketing rather than as cost of goods sold? Some Internet retailers have mislabeled certain expenses to improve gross margin results.

(Certain of these examples were reported in Elizabeth Macdonald, "Catch Me If You Can," *Forbes*, August 6, 2001, page 58.)

3. What is the Statement of Cash Flows?

The Cashflow Statement uses income and adjustments to income from the balance sheet in the presentation of the cashflow statement. This document is "cleaner" than the income statement, because it allows insight into the quality of a company's earnings. This report is largely resistant to hype or creative accounting.

There are three major sections in a cashflow statement, although foreign exchange earnings effects must also be reported.

- Operating cashflows show the ledger cash position; non-cash activities which impact income, such as depreciation; and changes in asset and liability accounts which affect cash, such as increases in receivables.
- Investing cashflows indicate such capital activities as the acquisition or sale of equipment, or the company's realized gains or losses in its bond or stock holdings.
- Financing cashflows reflect borrowing or repayment of debt, and stock sales or repurchases.

Companies with successful operations will have positive operating cash, and negative investing and financing cash. The latter reflects the pay down of borrowings from current operations and the internal financing of capital projects. Companies practicing creative accounting will have a difficult time with the cashflow statement, because cash inevitably reflects negative conditions in income and balance sheet accounts.

4. Advantages of the Statement of Cash Flows

- Provides management and investors an in-depth understanding of a company's sources and uses of cash
- Analyzes the effects of these uses on operating activities, the company's ability to meet its obligations and finance major transactions
- Determines the effect on financing of major transactions
- Calculates the company's ability to meet its obligations
- Greatly reduces the possibility of "managing" earnings to meet management, banker or investor expectations

Why is the Statement of Cash Flows not used more widely in analyzing a business?

- Long standing experience with the income statement and balance sheet
- Ease of examining earnings per share (EPS) vs. market expectations
- Expectations (occasionally unfounded) that a certified financial statement fairly presents a company's results

5. How the Cash Flow Statement is Constructed

The first section of the cash-flow statement uses accrual income as adjusted for changes in the financial statements during the year. A source of funds is an increase in cash, while a use of funds is any decrease in cash. For example, an increase in accounts receivable, say by $3 million during the past year, represents a use of cash. A source from operations could be depreciation, perhaps $6 million, as this is an expense that does not require cash. Assume that a company had a healthy $10 million in cash flow from operations in the previous year. This is particularly important to bankers as they prefer that loans be paid from operational cash flow.

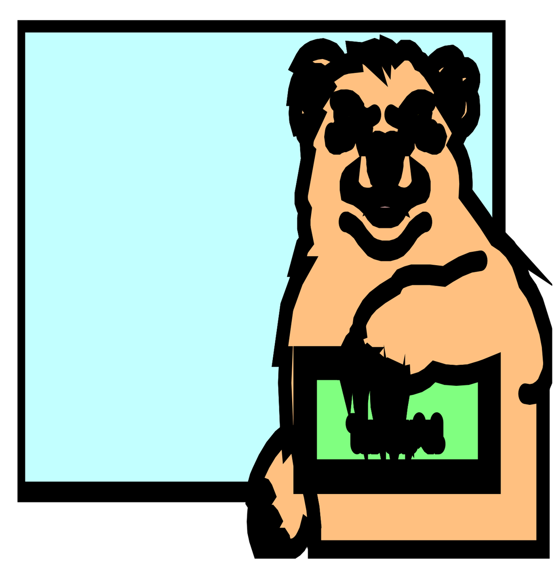
Strategic decisions in a company involve capital investments, permanent financing and finally, the calculation of the net cash position. For example, the source or use of cash for capital investments could show that assets increased by $20 million, a use of cash. The company could have paid down $5 million each on its bonds and mortgage, cash uses almost certainly required by the provisions of loan agreements. The net cash use could have been $5 million, which can be seen in the net change in cash and short-term investments in the reconciliation from the balance sheets for the past 2 years.

A company that just did make its cash requirements on a net basis suggests that discretionary use of cash for capital investments should be limited or prohibited except under specific circumstances. Those companies that do not make the required adjustments to these circumstances can find encounter business difficulties, including denial of financing by banks, a lowering of credit ratings, a forced sale of assets at below fair value, the termination of employees, the postponement of expansion plans, and other measures.

6. Classification of Cash Flow Activities

The most important components of cash flow are summarized below. The process involves converting accrual accounting to a cash accounting basis.

Type of Cash Flow	Cash Inflows	Cash Outflows
From Operating Activities	• Customer payments • Interest and dividend payments	• Payments to suppliers • Payments for operating expenses including payroll • Payments for interest • Payments for taxes
From Investment Activities	• Sales of assets • Sales of investments	• Purchases of assets • Purchases of investments
From Financing Activities	• Issuance of equity shares • Issuance of bonds and notes payable	• Dividend payments • Loan repayments • Treasury stock purchases



7. Research Statement

The use of traditional financial statement data rather than the Statement of Cash Flows apparently arises from custom rather than thoughtful analysis. The research proposed in this poster involves using these reports to determine whether there is a predictive capability for companies that have failed, regardless of the outcome: bankruptcy and reorganization or liquidation. Illustrative results follow (NI- net income):

Coldwater Creek ($000): NI $25,963,000 (2009)
$ -2,488,000 (2008)
Net Cash Flow: $-33,037 (2009)
Lear Corp. ($MM): NI $381 MM (2003)
$13 MM (2002)
Net Cash Flow: -$10 MM (2003)
(Coldwater Creek is a women's apparel retailer; Lear Corporation manufacturers motor vehicle parts and components)

Among the companies to be evaluated are:

- Circuit City (consumer electronics retailing)
- Bennigan's Restaurants
- Linen 'n Things (home furnishings retailing)
- Delta Airlines
- United Airlines
- Lyondell Chemicals
- General Growth Properties (real estate development)
- WorldCom (telecommunications)
- Best Products (catalog showroom retailing)
- Border's (book retailing)
- Caldor (department stores)
- General Motors
- Fortunoff (jewelry and furnishings retailing)
- Chuck E. Cheese (food retailing)
- Liberty Medical (home delivery of medical supplies)

Note: Financial companies and public utilities will be excluded in this research.

The proposed study will match company net income (after taxes) and its cash flow in the year of and the two years prior to the bankruptcy filing. Our hypothesis is that there is a higher correlation of bankruptcies to negative cash flows than to positive net income. The data source in all cases will be from published annual reports. Additional research will examine stock analyst recommendations on each company in the period prior to the bankruptcy.